KAISER ALUMINUM & CHEMICAL CORPORATION

PROPOSED AIR OPERATING PERMIT

RESPONSE TO COMMENTS

Public Notice for the Kaiser Tacoma Works draft air operating permit was published on January 25, 2001. Only Kaiser provided written comments to Ecology regarding this draft permit. This document is the Department of Ecology's response to these comments.

In what follows, Kaiser's comments are printed in italic print, Ecology's response follows. Where appropriate, similar comments have been combined and answered once. Condition numbers referred to in this response refer to the numbering in the draft permit. Some conditions were removed in response to these comments and have been renumbered. In addition, several of the standard conditions in Sections IV and V were changed to remove requirements that only apply if triggered.

1. Introductory Comments

The first paragraph of Section II states that IEUs "are not subject to testing, monitoring, recordkeeping, reporting, and certification requirements "unless the generally applicable requirements in the State Implementation Plan (SIP) impose them [WAC 173-401-530(2)(c)]." The Washington SIP does not impose testing, monitoring, recordkeeping, reporting or certification requirements on IEUs. Ecology recognized that fact in the Simpson Tacoma Kraft final permit, which states, at page 11: "Insignificant emission units or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements." Kaiser requests the same statement in this permit.

Also, the tables for the specific process requirements are found on pages 12-72 and the tables for facility-wide generally applicable requirements are found on pages 5-11.

Ecology's Response: The language included in Kaiser's draft permit more closely matches the cited regulations (WAC 173-401-530(2)(c)) than the language Kaiser quoted from the Simpson permit. No changes will be made.

The page numbers will be corrected in the proposed permit.

2. Dual System Approach to Monitoring of Certain Pollutants-Condition 1.a

The proposed "Means to Determine Compliance" requires two separate and distinct systems for compliance demonstrations beyond requested Method 9 observations. One

system involves "continuous observations" by operational employees while the second requires "weekly, documented, staff observations".

Kaiser has reviewed several other permits that have been issued by Ecology and approved by EPA Region 10. These permits include Simpson Tacoma Kraft Company (Tacoma), Washington Water Power Company (Kettle Falls), Boise Cascade Corporation's Plywood Plant (Kettle Falls), and three other smaller facilities.

Several conditions impose two separate and duplicative systems for monitoring opacity. One system requires continuous observations by trained operating employees. The second system requires weekly walk-around inspections by trained observers. There is no need for two separate systems to satisfy Title V monitoring requirements. To the best of Kaiser's knowledge, no other Title V permit issued by the Department of Ecology requires such duplication. Ecology and the aluminum environmental group worked for many months to develop the "see it and fix it" procedure for monitoring visible emissions. If Ecology now believes that Part 70 requires weekly inspections, then the requirement to train operational employees to watch continuously for opacity should be deleted. Training should be required only for those employees who conduct the weekly inspections. The requirement that "New employees must be trained within six months" is unnecessary, provided that only trained employees conduct weekly inspections. (This comment was also made regarding conditions 2.1.b, 2.2, 2.3.a, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.16, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3.a, 5.3.b, 6.1, 6.2)

Ecology's Response: The basis of the see it/fix it approach is ongoing observations by trained operational employees. The training need not be extensive, nor do “observers” or “inspectors” need to be certified in Method 9. The intent is to train operational employees to recognize visible emissions as they go about their regularly assigned tasks. The only extra work involved here is the annual training. However, Part 70 does require documentation of compliance with the see it/fix it approach. This is accomplished through documentation of weekly inspections, which can be streamlined through use of a standardized checklist. The education of operational employees regarding the impact they each have on air emissions takes advantage of their extensive knowledge of plant processes and may save the company time and money spent in compliance activities in the future.

There are many differences between pulp mills and aluminum smelters that make comparisons between permits problematic. For example, pulp mills often have continuous opacity monitors on the units that have opacity, making ongoing Method 9 observations or more frequent inspections unnecessary. Pulp mill emissions are not so dependent upon worker behavior. In addition, Kaiser has the potential for opacity and visible emissions in many more places due to the nature of materials handling and processing operations and the nature of the raw material (fine and abrasive). Finally, there are many more emission units at Kaiser than at Simpson and the potential for a release is therefore much higher. Annual training of operational employees and weekly inspections will be retained as requirements in this permit.

3. Frequency of Observations-Condition 1.a

The frequency for the observations is weekly for Tacoma and once every six months for other sources such as the Boise Cascade Plywood Mill. Kaiser questions the basis of this requirement. Setting aside the major emission units within the previously referenced sources and Tacoma, why are more frequent observations required for small dust collectors (average ≈ 4,000 cfm) at Tacoma as opposed to for example larger dust collectors (average ≈ 16,000 cfm) for Boise Cascade? (This comment was also made regarding conditions 2.1.b, 2.2, 2.3.a, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.16, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3.a, 5.3.b, 6.1, 6.2)

Ecology's Response: Ecology prepares each permit on a case-by-case basis, taking many factors into account, i.e. regulations, compliance history, source size, type of pollutants, etc. Also, permits are developed as a complete package rather than as a series of unrelated conditions. As a result, comparing permits is not always appropriate. For example, Kaiser Tacoma is much larger than Boise Cascade's Kettle Falls plywood mill. It emits eight times more particulate matter than Boise Cascade, and over seventeen times as much particulate matter than Boise Cascade, (as reported on the 1996 and 1997 air emission inventories and the 1999 air emission inventory, respectively). This was also the case for PM10 emissions. For the time period from 1996 to 1999 Kaiser emitted up to five times as much PM10. In addition, particulate emissions at aluminum smelters are much more abrasive than those produced at pulp or plywood operation.

Recent emission trends were considered as the permit requirements were developed. From 1993 to 1999 (see the support document) Kaiser's emissions of total fluoride and gaseous fluoride increased approximately 66 percent and 100 percent, respectively. Kaiser has also had a number of particulate matter violations in the past. Ecology also considered the amount of time it has taken Kaiser to repair observed and documented uncontrolled emissions.

Due to the specifics of the Kaiser Tacoma smelter, the weekly inspection requirement is considered appropriate and will be retained.

4. Responsibility for Visible Emission Compliance-Condition 1.a

Ecology's choice of language, "responsible for VE compliance." is inappropriate. The responsibility to maintain compliance with applicable requirements rests with the permittee, not specific employees. The language should reflect the person being in a coordinating role. (This comment was also made regarding conditions 2.1.b, 2.2, 2.3.a, 3.3, 3.4, 3.5.b, 3.6-3.16, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3.a, 5.3.b, 6.1, 6.2)

Ecology's Response: While the permittee, rather than individual employees, is responsible for compliance rather than specific employees, it is still necessary to identify the procedure to be used in the event that visible emissions are found. The language in the permit will be changed to read "…designated operational employees in each process must be trained to look for visible emissions and to notify specified staff assigned to track, evaluate and correct visible emission events."

5. Method 9 Certification Requirement-Condition 1.a

Condition 1.a should state explicitly that visible emissions observers need not be Method 9 certified.

Ecology's Response: A statement to this effect has been added to the support document.

6. Reporting Requirements-Condition 1.a

Operational problems that cause visible emissions can take longer than 24 hours to diagnose and repair. Given that observers will be trained to look for any level of visible emissions coming from a stack, as opposed to levels that exceed the SIP limit, Tacoma should have three working days to solve a problem before the permit requires notice to Ecology. (This comment was also made regarding Conditions 1.b, 1.c, 1.d, 2.1, 2.2, 2.3.a, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2)

Ecology's Response: Ecology acknowledges that it may take longer than 24 hours to complete needed repairs. This notification requirement serves only to alert Ecology's inspector to the fact that a corrective action is underway. As stated previously, there are many differences between Kaiser and Simpson, including compliance history and timeliness of repairs. Ecology believes this notification requirement is appropriate for Kaiser Tacoma. This condition will be retained.

7. Ecology's Use of the 24 Hour Notices-Condition 1.a

What will Ecology do to acknowledge receipt of any "24 hour notices" and what does it intend to do with the information? (This comment was also made regarding Conditions 2.1, 2.2, 2.3.a, 3.3, 3.4, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2)

Ecology's Response: Ecology will document receipt of such notifications in the AOP file. Ecology does not envision a formal acknowledgement procedure. For example, if Kaiser so desired, such notifications may be sent by e-mail to Ecology's inspector asking for a return e-mail indicating that the notice had been received. The intent of the reporting requirement is to allow Ecology's inspector to keep track of corrective actions that are underway.

8. Fallout-Condition 1.b

Kaiser has reviewed several other permits that have been issued by Ecology and approved by EPA Region 10. These permits include Simpson Tacoma Kraft Company (Tacoma), Washington Water Power Company (Kettle Falls), Boise Cascade Corporation's Plywood Mill (Kettle Falls), and three other smaller facilities.

The Boise Cascade and Simpson permits include a complaint validation step prior to initiating any corrective actions. The Tacoma proposal also requires actions based upon the elimination of fallout while no other permit requires this standard of performance. In demanding this level of performance, Ecology has gone beyond the requirement of the regulation itself.

What is the basis for requiring Tacoma to take corrective action regardless of whether there is any validity to the complaint when a validity verification step exists in all other permits reviewed?

Ecology's Response: Condition 1.b doesn't require the elimination of fallout. This condition directly quotes the actual language of the rule. The "Means to Determine Compliance" (now called "Monitoring, Recordkeeping and Reporting") column for this condition states "Initiate corrective action ... when any valid compliant is received." (Emphasis added) Ecology does not expect Kaiser to take corrective action for complaints found to be invalid. This condition will be retained.

9. Fugitive Emissions-Condition 1.c

The proposed "Means to Determine Compliance" requires the development of a third distinct system for facility personnel to essentially verify that control technology remains in place and is properly functioning. In addition, the proposal defines RACT through its specification of monitoring requirements. RCW 70.94.154(6) and WAC 173-401-605(3) both state that "Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance shall be considered to be RACT for purposes of permit issuance or renewal." The purpose of this language was to ensure that permitting authorities would not try to define RACT in the context of issuing Title V permits. The law provides that compliance with other applicable requirements shall be deemed to satisfy RACT for Title V purposes. In the case of Condition 1.c, for example, compliance with WAC 173-415-030(3) (the visible emissions rule) should be defined as compliance with WAC 173-415-030(4).

Kaiser has reviewed several other permits that have been issued by Ecology and approved by EPA Region 10. These permits include Simpson Tacoma Kraft Company (Tacoma), Washington Water Power Company (Kettle Falls), Boise Cascade Corporation's Plywood Mill (Kettle Falls), and three other smaller facilities.

In comparing monitoring/recordkeeping requirements from the above referenced permits as well as the proposed Tacoma permit, it is clear that Ecology has determined that a complaint driven response system is inappropriate for Tacoma while satisfactory for Simpson as well as Washington Water Power.

Ecology's Response: It was not Ecology's intent to require RACT through the Title V permit. Ecology will change the language in the "Description of Requirement" column (now called "Emission Limit or Work Practice Requirement") to more closely paraphrase the rule. The rule requires that "reasonable precautions" be used to prevent the release of air contaminants from the operation.

As previously stated, comparisons between industry types are problematic. In this instance, Ecology believes that fugitive emissions at Kaiser Tacoma are best addressed in a proactive manner similar to visible emissions (See Responses 3 and 6), rather than through complaints. The see it/fix it approach can also be easily adapted to fugitive

emissions and fugitive dust because conformity with these regulations is driven by frequent observations and prompt repairs. Weekly inspections to comply with condition 1.a can be combined with those to comply with condition 1.c. (fugitive emissions) and 1.h (fugitive dust).

10. Odor-Condition 1.d

The proposed "Means to Determine Compliance" requires both a mandatory complaint follow-up system as well as a notification requirement.

Kaiser has reviewed several other permits that have been issued by Ecology and approved by EPA Region 10. These permits include Simpson Tacoma Kraft Company (Tacoma), Washington Water Power Company (Kettle Falls), Boise Cascade Corporation's Plywood Mill (Kettle Falls), and three other smaller facilities.

The Boise Cascade and Simpson permits include a complaint validation step prior to initiating any corrective actions.

Ecology's Response: The "Means to Determine Compliance" (now called “Monitoring, Recordkeeping and Reporting”) column of this condition in Kaiser's draft air operating permit states "Initiate corrective action ... when any valid complaint is received." (Emphasis added)

11. Emissions Detrimental to Persons or Property-Condition 1.e

The Tacoma proposal requires actions based upon the elimination of identified emissions while no other permit requires this standard of performance. In demanding this level of performance, Ecology has gone beyond the requirement of the regulation itself.

Ecology's Response: The "Description of the Requirement" (now labeled “Emission Limit or Work Practice Requirement”) has been changed to quote the rule (WAC 173-400-040(5). Ecology believes the language in the "Means to Determine Compliance" (now labeled “Monitoring, Recordkeeping and Reporting”) is consistent with this rule.

12. Sulfur Dioxide-Condition 1.f

This proposal requires the reporting of sulfur dioxide mass balances on a monthly basis. Because this mass balance is made from materials inventories it can be susceptible to short term fluctuations and inventory adjustments. As a result, a longer interval reporting period such as once per quarter would alleviate the potential for such issues for this calculation. The suppliers of our coke and pitch provide an analysis that includes the sulfur content. The permit should stipulate that this sampling/analysis information can be used to meet this permit condition. Also because of the consistency of the material a monthly sample would be appropriate.

Ecology's Response: The sampling and testing frequency should be based upon variability. Kaiser's statement confirms that there is short-term variability in the coke supply. Additionally, the rule speaks of a monthly average not the suggested quarterly average.

Kaiser may submit their supplier's analyses for compliance as long as Kaiser certifies these results with the Kaiser Tacoma Works Manager's signature on a compliance certification.

Ecology will change the permit condition to reflect sulfur dioxide sampling and reporting of Kaiser's actual use of coke and pitch for each reporting month. The permit will require Kaiser to submit analyses of each load or batch of raw materials used for the month. These analyses can be performed either by the vendor or by Kaiser.

13. Grain Loading Requirement Inapplicable to Potrooms-Condition 1.i

Ecology has failed to show that this Condition is inapplicable to potrooms at the Tacoma facility and as such it is not a facility-wide requirement.

Ecology's Response: Ecology believes this is an applicable requirement to the potlines. However, as indicated in the Support Document for the draft permit (see page 10), a review of Kaiser's source testing of the potroom roof monitors from January 1996 to August 1999 indicates that potroom roof emissions average 0.0024 to 0.0025 gr/dscf with a standard deviation of 0.0005 to 0.0007 gr/dscf. During the same time period Kaiser routinely operated near the 15 pounds of particulate matter per ton of aluminum produced limit contained in WAC 173-415-030(2). This leaves very little room for error, and, accordingly, it is very unlikely that Kaiser can exceed the 0.1 gr/dscf limit without greatly exceeding the 15 pounds of particulate matter per ton of aluminum produced limit. Therefore, additional testing is not required over what Kaiser does for demonstrating compliance with the 15 pounds of particulate matter per ton of aluminum produced limit.

14. Source Test Based Grain Loading Requirements-Condition 1.i

The proposed "Monitoring" and "Monitoring Frequency and Timing" requires a routine frequency of emission source testing for all non-Insignificant Emission Units except for the potrooms. The specific frequencies are specified throughout the permit process tables. These sources are almost exclusively small nuisance dust collectors servicing material handling systems. These 23 sources range in size from 800 acfm to 13,000 acfm with an average size of ≈4,000 cfm and a median size of ≈2,000 cfm. The throughput rate for all 23 sources combined is about 6% of the potroom primary air control system.

A review of the Support Document provides no justification for basing the testing frequency for non-potroom sources on the potroom air control system monitoring frequency. Potroom sources are subject to a monthly compliance demonstration requirement while the non-potroom sources are not.

Kaiser has reviewed several other permits that have been issued by Ecology and approved by EPA Region 10. These permits include Simpson Tacoma Kraft Company (Tacoma), Washington Water Power Company (Kettle Falls), Boise Cascade Corporation's Plywood Mill (Kettle Falls), and three other smaller facilities.

In comparing monitoring/recordkeeping requirements from the above referenced permits as well as the proposed Tacoma permit, it is clear that Ecology has determined that routine source testing is not required for small dust collectors at other permitted facilities but has required testing for Tacoma's small nuisance dust collectors.

The Boise Cascade permit identifies 4 emission units that are in services similar in purpose to the Tacoma nuisance dust collectors. These emission units, C1, C2, C3, and C4 are 36,000 cfm, 18,000 cfm, 7,000 cfm, and 2,000 cfm in size, respectively. The permit condition that sets the monitoring requirement and frequency is as follows:

Plywood Plant "The following recordkeeping and calculations will serve to meet monitoring requirements. Monitoring for the Emission Limits/Work Practice Standards/Conditions given in Table A-3 are as follows [WAC 173-401-615(1)(b)]:

(a) Req. 19 PM </= 0.1 grains per dscf. WAC 173-400-060
Req. 28 PM </= 0.01 grains per dscf. NOC Ord. No. DE 94AQ-E111
Req. 21 SO_2 </= 1000 ppm, dry, 60 consecutive minutes. WAC 173-400-040(6) 1st ¶
Compliance with the emission standard for process units and for the NOC limit for BH1 (C1) shall be demonstrated by the use of recordkeeping of the unit's calculated PM and SO_2 concentration using an Ecology approved emission factor and estimated stack gas flow rate. Such recordkeeping must be done at least once each reporting period."
Note: The permit defines once per six months as the reporting period.

The Washington Water Power permit identifies two process areas (Process #1 and Process #3). Process #1 is a cooling tower serving the generating station and Process #3 is the boiler itself. The monitoring requirement and frequency for the cooling tower is as follows:

Monitoring Requirements (Process #1)

[WAC 173-401-615(1); WAC 173-401-630(1)]
As allowed under WAC 173-401-615(1)(b), the following recordkeeping and calculations will serve to meet monitoring requirements for the applicable general requirements.

(d) (d) Requirement #10: PM </= 0.1 grains/dscf @ 7% O_2.
Compliance with the emission standard for general process units, and specifically the cooling tower, shall be demonstrated by the use of recordkeeping of the unit's calculated PM concentration using an Ecology approved emission factor, per WAC 173-400-103(1), the cooling tower's estimated draft air flow rate and the TDS (total dissolved solids) of the water used. Adjustment of emissions to 7% O2 is not meaningful for cooling towers and therefore is not required. Such recordkeeping shall be done at least once per reporting period.

Note: The permit defines once per six months as the reporting period.

The monitoring requirement and frequency for the boiler air control system, which is 307,000 acfm is as follows:

Monitoring Requirements (Process #3)

[WAC 173-401-615(1); WAC 173-401-630(1)]

(a) (a) As allowed under WAC 173-401-615(1)(b), the following recordkeeping and calculations will serve to meet monitoring requirements for the listed pollutant and its allowable emission limit(s) under the applicable regulation / regulatory order.

(i)...

(ii)...

(iii) Requirement #11: PSD: PM </= 0.02 grains/dscf @ 12% CO_2.
Recordkeeping of estimated hourly fuel usage, and subsequent application of an Ecology approved emission factor (based on source testing) will be used to calculate grain loading and demonstrate compliance. Such recordkeeping must be done at least once per reporting period.
The multiclone (mechanical separator) shall be operated and maintained per Appendix B of the Operations and Maintenance (O&M) manual entitled "Air emissions Operations and Maintenance Manual for the Kettle Falls Generating Station", dated December, 1995 and on file at Ecology's Eastern Regional Office. Certification the multiclone is operated and maintained per the O&M manual shall be done at least once per reporting period. In addition, the inlet/outlet pressure drop across the multiclone shall be recorded and verified at a level to be approved by Ecology within 90 days of permit issuance (" 0.5 inches) of water column, at least once each reporting period to demonstrate compliance.
The electro-static precipitator (ESP) shall be operated and maintained per Appendix C of the O&M manual. Certification that the ESP is operated and maintained per the O&M manual shall be done at least once per reporting period.
Note: The permit defines once per six months as the reporting period.

As can be seen from the information above, other permits that contain emission units of the general type (material handling nuisance dust collectors) and of similar and significantly larger in size are not required to perform source testing to demonstrate compliance. The information above also shows that for a single emission unit at the Washington Water power facility, which is at least 3 times larger than all 23 impacted Tacoma sources, is not required to demonstrate compliance through source testing.
(This comment was also made with regard to Condition 2.1, 2.2, 2.3.a, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2)

Ecology's Response: Comparing individual requirements from different permits is inappropriate without considering the total permit. Kaiser's sources of particulate matter emissions are primarily materials handling and processing of a large amount of very abrasive material. To a large degree Kaiser's particulate emissions are a function of operation and maintenance. This isn't as much a factor at the other sources that Kaiser mentioned. The units that Kaiser mentioned are cooling towers or combustion sources,

not sources from which one would expect much in the way of particulate matter emissions. There is no source test data for most of the small sources mentioned. As a result, typical criteria Ecology uses to evaluate source test frequency (e.g. margin of compliance, data variability, need for add on controls, etc.) are not appropriate in this instance. Ecology sought another logical means to determine testing frequency and determined that testing could be based on the size of the emission unit (air flow) and likelihood of exceeding the standard. Ecology did not base the original sampling schedule solely on potroom testing requirements. Rather Ecology intended to treat all units equally based upon a standardized number of source tests per unit of air flow. The source test schedule is based upon the size (air flow) of the emission unit and whether the emission unit was controlled or uncontrolled, and, if controlled, what type of controls. The end result is that a baghouse-controlled source should be source tested once per year per approximately 20,000 cfm. Ecology understands that for the 23 small sources referenced here, source testing appears onerous. Ecology will consider reducing the source test frequency if Kaiser can demonstrate that ongoing operation and maintenance (or another surrogate) can assure compliance with the grain loading standard. In order to assure that problems are corrected in a timely fashion, the weekly inspection requirement (see Condition 1.a) will be retained. See also Ecology's response to comments 2 and 3.

15. Source Testing v. Observations-Condition 1.i

The emission units to which this Condition applies are small baghouses. A broken bag in one will cause a visible emission and be caught by the visible emissions observation program of Condition 1.a. Why has Ecology required excessive and unproductive reference method testing without any justification for need as compared to similar emission units at other permitted facilities? As an example, Ecology proposed to require source testing every six months as well as weekly inspections for a 4300 acfm dust collector that collects sawdust generated by a table saw. The Ecology issued and EPA Region 10 approved permit for an entire sawmill requires no source testing at all and inspections once every six months as adequate "monitoring/recordkeeping" requirements. (This comment was also made regarding Condition 2.1, 2.2, 2.3.a, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 4.2, 4.3, 4.4, 5.1, 5.2, 6.1, 6.2)

Ecology's Response: Ecology agrees that for small sources with a grain loading limit of 0.1 grains/dscf, observations of visible emissions may well prove to be sufficient to find problems and correct them in a timely manner. Based on Kaiser's past compliance history and the fact that there is no source test data available for these units, Ecology cannot justify a compliance demonstration based solely on observations. Ecology expects that this data will be used to demonstrate, in future permits, that such an approach is adequate. In order to assure that problems are corrected in a timely fashion, the weekly inspection requirement will be retained. Ecology believes the source testing required for these small sources is minimal, reasonable and useful. Conducting the source tests concurrently with visible emission observations will allow Kaiser and Ecology to determine whether visible emissions are an acceptable surrogate for grain loading.

In reference to the table saw, Ecology originally understood this to be an uncontrolled source without a dust collector. The source testing frequency will change to reflect the fact that this source is controlled by a dust collector.

16. Operation and Maintenance-Condition 1.n

This condition specifies monitoring for WAC 173-415-030(6). That rule was adopted by Ecology in July 1980 to implement the EPA Primary Aluminum Guidelines. The Guidelines, and WAC 173-415-030(6), regulate only "affected facilities," defined in 40 CFR 60.190 as potlines and bake ovens. See EPA, Primary Aluminum: Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants (December 1979) at 5-1. The Tacoma Works does not have a bake oven, and Condition 3.1.d specifies monitoring procedures for WAC 173-415-030(6) in the potrooms. Because WAC 173-415-030(6) is not a facility wide requirement, and because Condition 3.1.d prescribes monitoring to demonstrate that the potlines comply with this rule, Condition 1.n should be deleted.

Ecology's Response: Ecology disagrees. Ecology believes that WAC 173-415-030(6) is a facility-wide requirement and that operation and maintenance in a manner consistent with good air pollution control practices is very important to minimizing and eliminating pollutant air emissions throughout Kaiser's facility. No definition in Chapter 173-400 WAC or Chapter 173-415 WAC supports the contention that good operation and maintenance applies only to the potlines. In fact, the language in WAC 173-415-030(6) is mirrored in other air regulations. This condition will remain.

17. Coke/Coal Transfer Baghouse-Condition 2.1

Delete the once every two-year source test requirement from Condition 2.1.a. Conditions 2.1.d, e, and f should be replaced by a single monitoring program such as proposed by Tacoma for Condition 1.a.

Ecology's Response: Without any source test data on this unit, Ecology cannot justify the use of visual observations as the only method to determine compliance with this limit. Therefore, the monitoring frequency for this unit will remain unchanged (see Ecology's response to Comments 2, 3, 14, and 15, as well as the support document discussion of source test frequency for non-potroom sources). Conditions 2.1.d, e and f are conditions from an order. Ecology can't change these conditions without modifying the notice of construction approval order. As previously stated, if the results of the source testing reveal that VE observations are reasonably correlated to grainloading, Ecology will consider revising the permit and underlying order.

18. Materials Preparation Baghouse-Conditions 2.2 and 2.3

Delete the once per year source test requirement from Condition 2.2. Monitoring/recordkeeping requirements for the grain loading limitation are accomplished through the monitoring/recordkeeping requirements of proposed Condition 1.a.

Ecology's Response: See the response to Comments Nos. 2, 3, 14 and 15. The monitoring requirements for these units have been retained.

19. Potrooms-Condition 3.1.a

Potlines 1 and 2 have a common air control system and therefore sampling one reactor per each potroom air control unit would be sufficient. Another alternative would be to use the current system of monitoring three scrubbers per month, which would ensure that each of the thirty-six scrubbers is monitored annually when the facility is operating at full production.

Ecology's Response: The Draft Air Operating Permit already includes Kaiser's suggestion of "monitoring three scrubbers per month." The permit language states: "sample one reactor per potline per month." Kaiser has three potlines. Therefore, at most, Kaiser will have to sample three reactors per month. Ecology will clarify the permit language and state that only reactors of operating potlines need be tested.

20. Potroom Operations and Maintenance-Condition 3.1.c

These Conditions are related to the applicable requirements of WAC 173-415-030(6), which states:

> *"Operation and maintenance. At all times, including periods of abnormal operation and upset, owners and operators shall, to the extent practicable, maintain an affected facility, and operate and maintain air pollution control equipment associated with such facility in a manner consistent with good air pollution control practice. A plant may elect to establish a program, subject to the approval of ecology, for monitoring each potroom in order to demonstrate good operation and maintenance."*

The Ecology proposal is flawed in several respects:

1. *WAC 173-415-030(6) clearly states that it is the plant's prerogative to establish a program that demonstrates good operation and maintenance subject to Ecology's approval. Ecology has inserted a program of its own design rather than acting upon Tacoma's proposed program.*
2. *Ecology's proposal is clearly defining good operation and maintenance practices under the guise of monitoring requirements thus defining new applicable requirements.*
3. *Notwithstanding the issue of Ecology inserting its own program into the proposed permit, the proposal is technically flawed for the following reasons:*

- *The Ecology proposal emphasizes inspections that focus on cell doors and their status with regard to active cell work.*
- *Data on one hour interval sampling generated at the Tacoma Works and previously provided shows that the proposed types of inspections focuses on door condition (open vs. closed) which is a small element of potroom emissions.*
- *As a practical matter, the duration of each of Ecology's proposed inspections is of relatively short duration and as such cannot provide an overview of all potroom activities.*
- *Ecology's proposal is labor intensive from a paperwork management viewpoint and is essentially an accounting exercise not focused on environmental impact.*
- *It is Kaiser's belief that the time necessary to promptly complete both total fluoride and total particulate analytical work-ups and make the results available provides a*

more environmentally focused demonstration for compliance as compared to the very short but quick turn-around inspection that sees minimal potroom activities. Other than providing "instant satisfaction", the Ecology proposal provides no substantive link to the purpose of good operation and maintenance - control of emissions.

Ecology should modify the monitoring/recordkeeping portion of this Condition as follows:

1. Approve or identify the deficiencies in the Tacoma proposed program for demonstrating good operation and maintenance per WAC 173-415-030(6). An outline of the proposed program is provided in Attachment #1 of this document.
*2. Incorporate the approved Tacoma proposed program into the permit in place of Condition 3.1.c***.**

Ecology's Response: Operation and maintenance of processes and emission controls, in a manner consistent with good air pollution control practice, is a very substantial and consequential applicable requirement. Over 90% of a potline's emissions come from the potroom roof vents. These emissions are a direct result of the quality of Kaiser's operation and maintenance activities in the potrooms. These operation and maintenance activities affect both gaseous emissions such as gaseous/hydrogen fluoride, and particulate emissions. The operation and maintenance provisions in Section 3.1 are focused specifically on potline activities.

Ecology does not believe that this condition establishes new applicable requirements.

In Attachment 1 of Kaiser's comments on the proposed AOP, Kaiser discusses two O&M plans they have presented. The first was in response to a 1992 order and the second was in response to this proposed AOP permit.

As a result of deficiencies discovered during an air inspection in 1991, Order No. DE 92-AQI022 was issued and required Kaiser to "prepare and provide to Ecology... an Operations and Maintenance Plan for all air pollution control equipment presently in operation at Kaiser's Tacoma Works aluminum reduction facility." The order indicates the plan was intended to be for air pollution control equipment, rather than for the potline itself. The plan submitted to comply with this order only briefly discusses the potroom hooding aspect of air pollution control equipment.

The second program that Kaiser proposed for an O&M plan is comprised of employee training; data collection; and control charting of emissions. Ecology's proposed operations and maintenance requirement also includes employee training. Teaching employees the environmental repercussions of their actions is a means to build awareness and annual training refreshers are a means to reinforce the effect their actions have on the environment. This training is further reinforced through potroom inspections to ensure the training and training program is adequate.

After training, Kaiser then proposed to collect and use statistics to analyze emission trends. Conceptually this is a means to determine the effectiveness of operation and

maintenance activities. Kaiser indicated they would produce control charts, with control and warning limits. In addition, these limits would be based upon what the system is capable of doing.

Ecology finds two fundamental concerns with this proposal. The first is that the data collection has to be representative, timely and appropriately frequent. Kaiser collects the data from source testing on a periodic basis (Line II and Line IV are each typically sampled three times per month). Ecology understands that Kaiser typically batches the analysis of several source tests to minimize setup and analysis time. This means that it may be many days or weeks before Kaiser has the results of the source tests - much too long after the fact to do any good in finding or remedying a problem. Timely, in this context, must be immediate to affect a behavior change, so that the offending action can be corrected and reduce emissions to the environment.

The second concern is that to be of use, control charts have to be based on a process that is "in control." Kaiser's gaseous fluoride emissions have increased significantly over the past few years for no reported cause. Establishing and using control charts that encompass recent periods of operation and maintenance inconsistent with good air pollution control practices will not suffice.

Nonetheless, Kaiser's approach would be acceptable to Ecology if Kaiser had continuous real time data collection from a continuous emission monitor or frequently sampled and timely analysis of source test data; and Ecology and Kaiser could agree upon an "in-control" data set from which to base the initial control limits. To this end Ecology staff are available to observe source tests establishing this baseline of emissions consistent with good air pollution control practice. Ecology would also accept surrogates for operation and maintenance in the form, for instance, of frequent hooding efficiency tests. Demonstration of hooding efficiency could address Kaiser's concern regarding short duration inspections and labor intensive paperwork. Barring an agreement between Ecology and Kaiser on what constitutes "in-control" air pollution control practices or mutually acceptable surrogates, Ecology believes frequent inspections that provide instant feedback is a worthy alternative. Inspections are inexpensive, provide instant feedback and remind workers to consider their impact on the environment. The training and inspection plan requirement will be retained in the permit. See also the response to Comment no. 2.

21. Collection/Removal Efficiency-Condition 3.1.d

This condition addresses WAC 173-415-030(1)(b), the fluoride collection/removal efficiency rule. The proposed monitoring requirements are based on a misinterpretation of the rule. As documented in Matt Cohen's April 29, 1998 letter to Mary Sue Wilson that is provided in Attachment #2 of this document, WAC 173-415-030(1)(b) is a design standard. Tacoma demonstrated compliance with this standard in 1981, by submitting test data showing that Tacoma's primary emission control system had an overall primary control efficiency exceeding the requirements of the rule. See Bruce Johnson Memorandum of March 10, 1982, attached to the above referenced letter. Periodic source testing is not needed for this rule, and a failure to meet the control efficiency

standard during a specific source test would not necessarily prove non-compliance with the rule.

EPA recognized in the Primary Aluminum Guideline Document that on-going control system efficiency is demonstrated by continuing appropriate performance, as well as good design. WAC 173-415-030(1)(b) sets a standard for design of the collection/removal systems. WAC 173-415-030(6) establishes the applicable operation and maintenance requirement, WAC 173-415-060(1)(d) requirements provide adequate performance data on a routine basis, and Tacoma has proposed a comprehensive method to monitor control system operation and maintenance.

In addition to the issue of this applicable requirement being a design standard, it is clear from Ecology's "Description of Requirement" that it believes the standard to be bifurcated. It is clear from a previous Responsiveness Summary when the underlying requirement was last modified that the equivalent of their combined performance is the applicable requirement.

Ecology should modify the "Means to Determine Compliance" and "Description of Requirement" portions of this Condition as follows:

1. Ecology should correctly summarize the applicable requirement in the "Description of Requirement" column as being a combined requirement.
2. Ecology should revise the "Means to Determine Compliance" requirements to reflect the fact that compliance has been previously been demonstrated and that no on-going demonstrations are required.

Ecology's Response: Ecology believes that WAC 173-415-030(1)(b) is both an ongoing and a bifurcated standard, and is therefore properly described in the permit. Kaiser asserts that the standard in WAC 173-415-030(10(b) is a one time design standard that need not be met on an ongoing basis. However, Ecology demonstrated its intent to require compliance monitoring for collection efficiency in 1990 and 1991 by issuing Order No. DE-I035 to address compliance monitoring issues at the primary aluminum smelters. Kaiser responded by submitting a monitoring plan dated August 1, 1991. In this plan Kaiser proposed to: “Annually the collection efficiency and treatment efficiency will be determined by collecting three gaseous fluoride samples in each of the Line I and Line IV ducts. The average duct gaseous fluoride and the running 12 month roof and scrubber emissions will be used to calculate these efficiencies.” This language indicates Kaiser’s understanding of the two pronged nature of this rule as well as the need to measure collection efficiency in an ongoing manner.

Kaiser’s MACT strategy also demonstrates the importance of maintaining collection efficiency as an emission control and minimization strategy. The following paragraph from page 3 of Kaiser’s July 21, 1998 letter to Ecology highlights Kaiser’s reliance on projects to improve collection efficiency as a strategy to comply with MACT.

> Based upon the data collected from the above referenced investigations and measurements, it became clear that in order to sustain long term compliance with the MACT standards for potlines that a two pronged approach was needed. The first element of the approach was determined to be increased cell ventilation rates so that cells would be operating in a range on the collection efficiency curve that is essentially flat. As a result, the collection efficiency would be unaffected by normal air flow rate variability. (Normal variability results from pitch condensate that is routinely removed as well as the accuracy of pitot tube measurements). The second element of the approach was determined to be a more readily maintainable pot sealing system so that the degradation of the sealing system from normal wear and tear would not cause the collection efficiency to drop off as rapidly given the variability in air flow rates.
>
> Thus, these two elements have the combined effect of allowing cells to operate on a flat portion of their collection efficiency curve and to have its "family of curves" from wear and tear over a narrower range.

In a September 13, 1999 letter to Ecology, Kaiser indicated that improvements to pot door sealing, namely by installing top and bottom door seals; and increasing pot air flows by approximately twenty percent through replacing conventional bags with pleated bags would, at the mean minus two standard deviations (approximately 95 percent confidence), increase air flow from 3015 acfm to 3618 acfm per pot. This would provide a corresponding improvement to collection efficiency of 77 percent to 85 percent. These values were determined through tests Kaiser conducted on pot 160 in Line IV. Again, this approach indicates an understanding by Kaiser that ongoing compliance with the collection efficiency standard was necessary.

Collection efficiency has the potential to be one of the most valuable measurements of environmental performance at primary aluminum smelters. Over ninety percent of a primary aluminum smelter's emissions come from the potroom roofs. Gaseous pollutant emissions, and, to a lesser degree, pollutant emissions of particulate matter from the potrooms are by and large a function of collection efficiency. Any effort to improve collection efficiency has a direct effect on reducing emissions to the atmosphere by at least 100-fold (e.g. one pound of gaseous fluoride emitted to the roof that is instead collected and routed to the dry scrubbers is reduced conservatively by over 99.0%. Instead of one pound being emitted to the atmosphere, only 0.01 pounds of gaseous fluoride would be emitted, a minimum of a 100-fold decrease in emissions).

EPA states, in their notice of availability of final guideline document, 45 Fed Reg. 26294, on page 26295, that:

> Compliance with guidelines is normally determined through performance tests under representative conditions. The initial performance test and <u>subsequent performance tests</u> should insure that equipment is installed which will permit the guideline to be attained, and that <u>such equipment is not allowed to deteriorate below this capability</u>. *Emphasis added*.

EPA also states, on page 1-15 of their publication titled: Primary Aluminum Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants, EPA-450/2-78-049b, December 1979 that: "Well-designed retrofit hoods can easily obtain the tabulated efficiencies if properly maintained and if the cells are carefully operated."

These statements imply that EPA did not intend this requirement to be a design-only/one-time requirement. Washington State adopted these efficiency values into state regulation and required the aluminum smelters to comply with the regulation by January 1, 1984.

The requirement to demonstrate ongoing collection efficiency will be retained.

Ecology believes that WAC 173-415-030(1)(b) is a bifurcated standard. The collection system efficiency is to be 85% for horizontal stud soderberg pots and the removal efficiency of the primary control system is to be 95% of the fluoride collected. The treatment efficiency requirement is easily met by virtue of the dry alumina scrubbers. These systems are typically 99% efficient even through periods of poor operation and maintenance.

EPA proposed separate collection and treatment efficiency standards in the 1979 Guidelines mentioned above. On page 1-13, EPA states: "The conclusion, therefore, is that the best system of emission reduction, considering costs, is an effective hooding system (which minimizes secondary emissions) in combination with wet or dry scrubbing of the primary gases." This indicates that EPA considered compliance demonstration to be two separate requirements, not a single combined requirement. Ecology's regulations are consistent with EPA's intention, also having separate standards.

The requirement to demonstrate removal efficiency will be retained.

22. Potroom Roof Monitors-Condition 3.2.b

The predecessor orders to Order DE 95 - AQI032 required that Potroom crust breakers be physically modified so that the compressed air exhaust is no longer discharged toward the floor. All crust breakers have long since been modified. No monitoring is required because the Order has been complied with through the completion of the required work. The "Means to Determine Compliance" must be changed to "No monitoring required - work completed.

Ecology's Response: Ecology will remove this permit condition.

23. Operation and Maintenance Compliance Demonstration for the Anode vacuum and Dual-Flow Dampers-Conditions 3.2.c and 3.2.d

Ecology's proposal institutes an inspection program for the validation of good operation and maintenance. As discussed in comments related to Condition 3.1.c, Tacoma's proposed program for demonstrating good operation and maintenance adequately addresses the "Means to Determine Compliance" for these Conditions. Ecology need only approve the program or identify deficiencies.

Ecology's Response: Order No. DE 95-AQI032 required that the anode vacuum system be operated and maintained, without specifying any method for demonstrating compliance. WAC 173-401-615(1)(b) and 173-401-630(1) require sufficient monitoring to assure compliance with all permit conditions. Weekly inspections and compliance with Condition 3.1.c will accomplish this. No changes will be made to this condition.

24. Line Four Anode Vacuum-Condition 3.5.e

The "Means to Determine Compliance" for this unit (Condition 3.5.e) refers to slide chutes, belt cleaners and screw conveyors that do not exist in that system.

Ecology's Response: The permit will be corrected.

25. Line Four Anode Vacuum-Condition 3.5.f

Because this source testing will probably be contracted out, 30 days to provide test results may not be long enough. 90 days to report test results should be allowed.

Ecology's Response: Prompt analysis and reporting promotes the correction of deficiencies in an expedient manner. In addition, the requirement to submit a report within 30 days of testing is an applicable requirement in Order No. DE 98-AQ1090. No change in the reporting time frame will be made.

26. Potline MACT requirements-Condition 3.17

As you are aware, the operation of the Potrooms has been curtailed because of the current power situation in the Northwest. Until operations are restarted, several of the conditions will not be in effect.

Ecology's Response: Ecology is aware of the curtailment and would expect that certain conditions, such as those for monitoring emissions, wouldn't be in effect, i.e. if the plant isn't operating there shouldn't be any emissions to measure. A paragraph addressing compliance requirements during temporary periods of curtailment has been added to section II of the permit

The draft permit language has been modified in many places to reflect Kaiser's curtailment.

27. Potline MACT extension-Condition 3.18

The requirements of this extension were intended to be in effect during the extension time period and would not continue to be effective after the compliance dates (November 2000 for Line 4 and May 2001 for Lines 1 & 2). The requirements that relate to Line 4 should be deleted since the extension period has past. It is anticipated that the permit will not be issued before the extension period for Lines 1 & 2 is past and therefore these requirements should also be deleted.

Ecology's Response: The MACT extension was in effect until May 31, 2001. Since the date has passed, the extension itself is no longer an applicable requirement and will be

deleted from the permit. Kaiser will have to demonstrate compliance with all the MACT requirements within 180 days of restart.

28. Secondary Aluminum Production-Condition 4.5

These Conditions relate to Secondary Aluminum Production Maximum Achievable Control Technology (MACT) standards that have a future effective date.

The proposed Conditions 4.5.a through 4.5.kk contain applicable requirements from the rule that are not currently applicable or may no longer be applicable at a future date.

As a result, Ecology should withdraw Conditions 4.5.a through 4.5.kk and insert a "place holder in Section IV of the permit as has been done for Risk management Plans under 40 CFR Part 68 and Stratospheric Ozone Protectin under 40 CFR Part 82. The following language for this insert is recommended to be as follows:

IV.27 National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production.....40 CFR 63 Subpart RRR

The permittee shall comply with the applicable requirements of Subpart RRR as identified in 40 CFR 63.1500 in accordance with the compliance dates identified in 40 CFR 63.1501.

Ecology's Response: Ecology must include all applicable requirements in a Title V permit. Secondary aluminum MACT is an applicable condition. Ecology can only respond generally about Kaiser's secondary MACT comment without more specific comments from Kaiser on individual Secondary MACT permit conditions.

Ecology understands that compliance with MACT need not take place until March 24, 2003. However, if Kaiser restarts the potlines before this date, the conditions in the permit are, to the best of Ecology's knowledge, the appropriate applicable requirements for secondary aluminum MACT. When Kaiser restarts, Ecology may reopen the permit if specific MACT conditions do not apply or if Kaiser's operations have changed.

Also, these conditions may have to be modified in the future depending upon the operational status of Kaiser's Rod Mill and Kaiser's source(s) of the aluminum to be used in the Rod Mill.

For these reasons this condition will remain unchanged.

29. Stud Cleaning-Condition 5.3

What is the basis for Ecology determining that the compliance demonstration required for Tacoma for grain loading needs to be source test based when this type of demonstration is not required for the other referenced permits? Why is the visible emissions observation system proposed by Tacoma for Condition 1.a inadequate when a virtually

identical system on a far less frequent schedule is adequate for larger sources at Boise Cascade and Washington Water Power?

Ecology's Response: This requirement will be retained. See Responses 2, 3, and 15.

30. Submittal of source test results-Condition 5.3.f

Because this source testing would probably be contracted out, 30 days to provide test results may not be long enough. Allow 90 days to report test results in condition 5.3.f.

Ecology's Response: Prompt analysis and reporting promotes the correction of deficiencies in an expedient manner. This requirement will be retained.

31. Identification of Insignificant Emission Units

Notwithstanding the comments above concerning certain small emission units such as nuisance dust collectors, a review of the criteria for IEUs was made. In applying the criteria of WAC 173-401-530(1)(a), 17 emissions units that had been identified in the permit application as non-IEUs have been determined to actually be IEUs on the basis of actual emissions. The following table provides the information upon which this assessment was made.

Discharge Point No.	Description	cfm	Hours per Week	Gr/scf	Tons PM Per Year	@10% PF Tons F Per Year
3.3	L1 Anode vacuum baghouse	1500	40	0.01	0.13	0.01
3.4	L2 Anode vacuum baghouse	1500	40	0.01	0.13	0.01
3.6	L1&2 unloading baghouse	3900	40	0.01	0.35	0
3.8	L1&2 airlift baghouse	1200	168	0.01	0.45	0.04
3.9	L1&2 baghouse	1200	168	0.01	0.45	0.04
3.10	L4 bucket elevator baghouse	4550	40	0.01	0.41	0
3.11	L4 Baghouse - conveyor transfer point	2100	40	0.01	0.19	0
3.12	L4 baghouse, into 1,000 ton tank	1700	40	0.01	0.15	0
3.13	L4 baghouse, airslide to scrubbers	4600	40	0.01	0.41	0.04
3.14	L4 baghouse, for airlift	1200	168	0.01	0.45	0.04
3.15	L4 baghouse for return airslide	1200	168	0.01	0.45	0.04
4.18	Baghouse for cleaning Cruce Lid	800	24	0.01	0.04	0.00
4.19	Baghouse for cleaning Cruce	1800	24	0.01	0.10	0.01
5.8	Bath crushing Baghouse	6000	16	0.01	0.21	0.02

5.9	*Baghouse for super cleaning*	*10000*	*16*	*0.01*	*0.36*	*0.04*
6.9	*Baghouse, Carpenter shop*	*4300*	*15*	*0.01*	*0.14*	*0*
6.13	*Baghouse, bag rehab - cleaning*	*10000*	*20*	*0.01*	*0.45*	*0.04*

An appropriate permit application revision has been transmitted to Ecology under separate cover. Based upon this determination (as detailed in the permit application revision) the above identified emission units should be deleted from the permit.

Ecology's Response: Ecology believes that a properly operated and maintained fabric filter dust collector should emit less than 0.01 grains per dry standard cubic foot (gr/dscf). However, the federally enforceable limit for emission units not otherwise limited is 0.1 gr/dscf (WAC 174-400-060). Kaiser's original application was correct when identifying the applicable limit as 0.1 gr/dscf, and this limit must be used in the calculation of the IEU threshold. A review of the above data indicates that only the baghouse for cleaning the cruce lid (Condition 4.3) is below the IEU threshold. This unit will be removed from the permit.

See the Support Document for more detail.

32. General terms and conditions-recordkeeping- Condition IV.1

This condition specifies the records that the permittee must maintain of the monitoring required by the permit. The first paragraph accurately tracks the language of WAC 173-401-615(2). The second paragraph imposes additional demands that are not supported by any applicable requirement, and that are not included in other Ecology Title V permits. See, e.g., Simpson Tacoma Kraft Final Title V Permit, Condition 26; Boise Cascade Kettle Falls Plywood Final Title V Permit, Condition II.4; Washington Water Power Kettle Falls Generating Station Final Title V Permit, Condition II.4.

The second paragraph of Condition IV.1 violates WAC 173-401-600 (every requirement in a Title V permit must be based on an applicable requirement) and unfairly exposes the Tacoma Works to burdens not imposed on other Ecology sources. It should be deleted.

Ecology's Response: The second paragraph of this section is supported by WAC 173-401-600(2), WAC 173-401-605(1) and WAC 173-401-615(1)(b). This condition is included in this section so that every time the permit required an inspection that the same language wouldn't have to be repeated. For many units within the permit, Kaiser is required to conduct weekly inspections. The second paragraph provides further clarification of recordkeeping requirements and is consistent with the requirements of WAC 173-401-615(1)(b) to provide for periodic monitoring (which includes recordkeeping) in the event that the underlying applicable requirement does not specify such conditions.

33. Recording of permit deviations-Condition IV.4

This condition amends the language of the applicable requirement that it purports to implement, in violation of WAC 173-401-600. The phrase "such as the date and nature of the deviation" must be deleted.

Ecology's Response: This condition is in the "Recordkeeping Terms & Conditions" section of the General Terms and Conditions of the Permit. WAC 173-401-615(3)(b) requires "The source to maintain a contemporaneous record of all deviations." The addition of "...such as the date and nature of the deviation" is consistent with WAC 173-401-615(2) (see condition IV.1 in the draft permit). When reporting a violation, Kaiser must provide certain information (as required by WAC 173-401-615) so that Ecology can decide upon an appropriate response. This information includes the date, nature, cause, severity, etc. This condition will remain unchanged.

34. Certifications-Condition IV.6

This condition requires the responsible official to certify the accuracy of reports filed pursuant to the permit. WAC 173-401-615(3)(a) requires the permittee to file monitoring reports every six months. WAC 173-415-060(1) requires monthly reports on certain WAC 173-415 parameters, but it does not require certification. Kaiser requests the addition of language to Condition IV.5 that allows the responsible official to submit a batch certification every six months, covering every monthly monitoring report filed since the last certification. Ecology included language to this effect in the final Simpson permit, condition 35 (requires batch certification every three months). The addition should read as follows: "Where the permit requires reporting more frequently than once every six months the responsible official's certification need only be submitted once every six months covering all required reporting since the date of the last certification."

Ecology's Response: Simpson notwithstanding, Industrial Section intends to continue the tradition of monthly certifications. More recent permits issued by the Industrial Section all require monthly reporting. This is supported by WAC 173-401-615(3)(a) as it states "...at least once every six months." Kaiser already makes these monthly certifications when submitting their NPDES permit Discharge Monitoring Reports. This condition will remain unchanged.

35. Monthly Reports-Condition IV.7

This condition improperly combines two different reporting requirements. WAC 173-415-060(1) requires monthly reporting only of certain data required to be collected under that rule. All other reporting required by the permit must be filed every six months, per WAC 173-401-615(3). Given that two separate rules address reporting, it makes sense to discuss reporting in two separate permit conditions:

IV.6 Monthly Reporting .....WAC 173-415-060(1)

> *Within thirty days of the end of each calendar month the permittee shall report the routine monitoring data collected during that month to satisfy the requirements of WAC 173-415-060(1).*

IV.7 Part 70 Reporting .....WAC 173-401-615(3)(a)

> *At least once every six months, the permittee shall submit a report of any required monitoring that has not been reported under Condition IV.6. All instances of deviations from permit requirements must be clearly identified in such reports. All reports required by this condition must be certified by a responsible official in accordance with Condition IV.5.*

Ecology's Response: Ecology disagrees. What WAC 173-401-615(3)(a) states is that "Submittal of reports of any required monitoring at least once every six months." The language in condition IV.6 is consistent with WAC 173-401-615(3)(a). The reporting required under WAC 173-415-060(1) would be included in "any required monitoring" in WAC 173-401-615(3)(a). See Ecology's response No. 35 for further information.

36. Unavoidable Excess Emissions Rule

Kaiser requests the inclusion in this permit of language incorporating the unavoidable excess emissions defense found in WAC 173-400-107. To the best of Kaiser's knowledge a standard condition summarizing this rule appears in every other Title V permit issued by the Industrial Section, and it belongs in this permit as well. See Simpson Tacoma Kraft Final Permit, Condition 23; Boise Cascade Wallula Proposed Permit, Condition 23.

Ecology's Response: The language in the permit will be changed to include the Unavoidable Excess Emission rule language found in the most recent permits issued by the Industrial Section.

37. Data Recovery- Condition IV.7

Several sections of the primary aluminum MACT rule require continuous monitoring of emissions or operating parameters. See, e.g., 40 CFR 63.848(f) (continuous parametric monitoring system for each emission control device); 40 CFR 63.848(d)(2) (HF CEM as an approved alternate monitoring system). In light of these requirements, and given the possibility that other continuous monitoring systems may be installed in the future, this permit should include a data recovery condition. Ecology included such a condition in the Simpson Tacoma Kraft permit (Condition I.11), but it does not allow for routine monitor downtime associated with calibration checks and maintenance. Kaiser suggests the following language, derived from PSAPCA's Title V permits:

IV.28 Continuous Monitoring Systems.....WAC 173-401-615

> *Except where an applicable requirement contains more stringent provisions, permittee shall recover valid monitoring data for at least 90 percent of all periods over which data are averaged or, if no averaging is used, collected, during each month in which this permit requires continuous monitoring of a process or parameter. Except where an applicable requirement contains more stringent provisions, permittee is not required to monitor during periods of monitor system breakdown, malfunction, repairs, calibration checks and acts of God deemed by Ecology to be unavoidable. The monitoring reports required by Condition IV.7*

shall include an explanation for any instance in which the permittee failed to recover valid data from a continuous monitoring system for more than two hours in any 24 hour period, excluding periods during which the monitored process did not operate.

Ecology's Response: Ecology agrees that such a provision is desirable. However, EPA has informed us that such a provision is not appropriate as a standard condition. The NSPSs (and MACT and existing PSD permits) either include their own data recovery language or include no minimum data recovery language, meaning that 100% data recovery is required. In neither case can a Permitting Authority alter those requirements. The language you propose would be inconsistent with the data recovery requirements in those standards. Industrial Section will no longer include this data recovery provision in its permits.

38. Permit Shield/Inapplicable Requirements

A review of the Inapplicable Requirements as contained in the draft permit shows that there are additional inapplicable requirements for Tacoma. These additional inapplicable requirements are identified in the permit application revision that has been transmitted to Ecology under separate cover and enclosed in Attachment #5.

Ecology's Response: Ecology has included the inapplicable requirements from Attachment #5 which were clearly inapplicable. Ecology did not include as inapplicable those requirements which may be applicable in certain situations, are applicable if triggered, or which are applicable.